

While on a visit to the Olds plant Roy Dikeman Chapin had had the opportunity to go for a ride in a curved-dash Oldsmobile with an engineer at the break-neck speed of 15 miles per hour. Chapin was very impressed and decided then and there that he was going to pursue an automotive career.

Chapin went right to Ransom E. Olds and asked for a job. Olds saw himself in Chapin and hired him as a demonstrator. The mere fact that he would be driving automobiles was all that mattered to Chapin. The \$35 monthly salary that he received was just an added benefit. He worked on every machine in the shop until he had mastered them all. Chapin was an excellent photographer and when R. E. Olds decided on a direct mail campaign, which required an elaborate catalogue, Chapin was given the assignment. It was the first sales manual ever used by the United States automobile industry and it was an excellent one.

At the age of 24, Chapin was appointed sales manager at Oldsmobile, where he struck up a long and lasting friendship with Howard Earle Coffin, chief engineer at Oldsmobile. Coffin would discuss any new ideas fully with Chapin both from the engineering standpoint and its sales worthiness. Chapin, in turn, would pass any feedback from his sales representatives on to Coffin. It was a great team.

Chapin and Coffin eventually joined forces to build automobiles of their own—the Thomas-Detroit. This was followed later on by the Chalmers-Detroit. Chapin's extensive travels to meetings with Oldsmobile dealers had taught him what the requirements were in different parts of the country. He had analyzed the markets and found that the greatest demand was for a low-cost, quality-built automobile. The \$2750 Thomas-Detroit, for example, was at least \$1000 more than most would-be customers could afford to pay.

These findings resulted in their next product—the four-cylinder Chalmers-Detroit 30, which sold for \$1500. It was an immediate success and the plant was

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\* Reprinted from "Runningboard Rundown," Spring-Summer 1984, bi-annual publication of Chautauqua Lake Region AACA, edited by Leonard Larson.

# Hudson Motor Cars

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## 1909-1957\*

by Len Larson

greatly expanded. This success prompted Chapin and Coffin to think along lines of an even lower priced vehicle.

The new car was designated the Model "20" and their target price was under \$1000. George W. Dunham and Roscoe B. Jackson had just joined Chalmers-Detroit and a subsidiary company was formed to build the Model "20" with Jackson in charge. Dunham was given the assignment to develop the Model "20" and must be given the credit for the final product.

Some historians believe that Chalmers' interest in the new car may have been in a cheaper model to add to his sales line. Others feel that the name Hudson clearly indicated his disinterest in the project. The car was named after Roscoe B. Jackson's wife's uncle, J. L. Hudson, a department store owner, who was the only one ready, able and willing to finance the new concern. J. L. Hudson did become president of the company but took no active part in its operation. It was more of an honorary position. He was, however, somewhat apprehensive about the undertaking until it started to pay its own way.

### The Early Years

The Hudson Motor Car Company was incorporated on February 24, 1909 under the laws of the State of

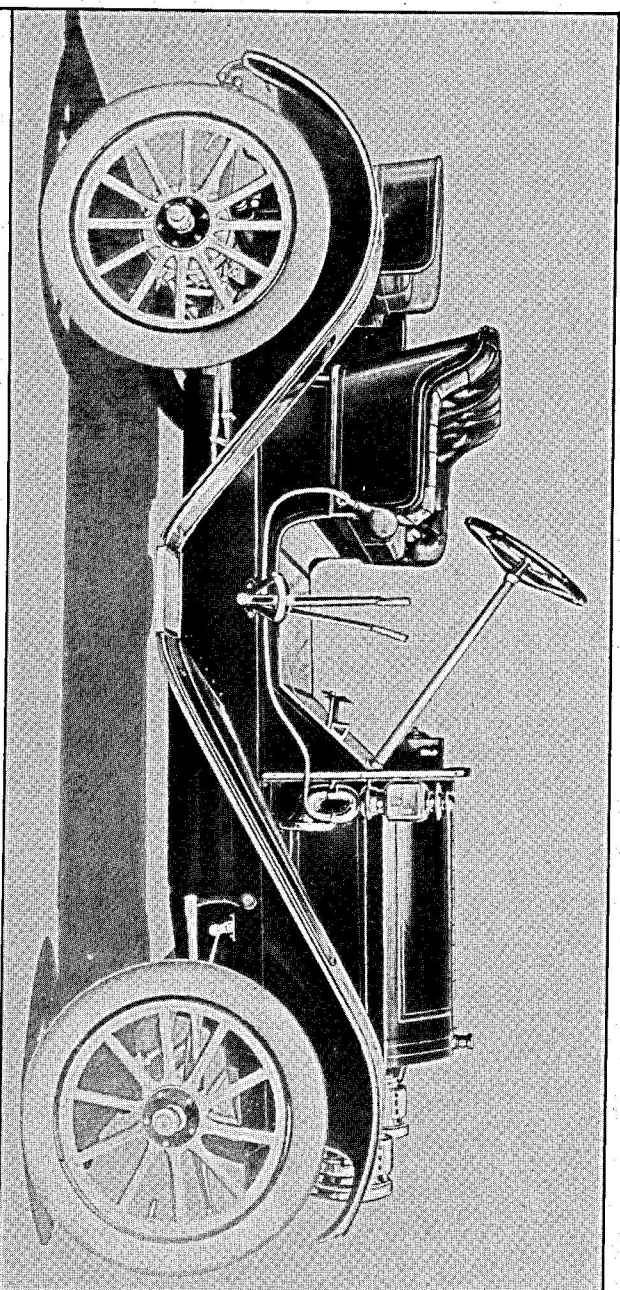
Michigan. Designs for the new car had been finalized, a two story plant with 80,000 square feet of floor space was purchased, and 500 workers were hired to build the cars.

The company ran their first advertisement in the *Saturday Evening Post* on June 19, 1909. It pictured a racy looking little roadster with two bucket seats and a gasoline tank mounted behind them. The text stated, "Here is a car that is good looking. It is big and racy. Note the graceful and harmonious lines. Observe the sweep of the fenders and the frame. The Hudson "20" has a sliding gear transmission, selective type, three speeds forward and reverse. The motor is vertical, four-cylinder, four-cycle, water-cooled and known as the Renault type."

The first Hudson "20" rolled off the assembly line February 3, 1909 and became an immediate success. Hudson set an automotive industry record for the first year in business by producing and selling over 4000 cars by the end of the first year. The firm sold \$4 million worth of cars in the first 16 months in business.

The first car off the line was finished in maroon trimmed in black and sported a brass triangle on its radiator that was to become famous as a symbol of performance, service and value. It had cast aluminum floor boards, extensive use of brass, and dual spark plugs—all for \$900. This was only \$50 more than Ford's Model T. Demand for the new small car was so great that advanced sales financed the company once production began. From then on, expansion was financed entirely out of earnings.

By the end of 1909, 1000 cars had been sold, and in December, Hudson split with Chalmers-Detroit and became independent. Chapin became president of the new company and J. L. Hudson was chairman of the board. Roscoe B. Jackson became general manager and Coffin was vice-president in charge of engineering. Lengthy negotiations began with Chalmers-Detroit, after the split, over the rights to Coffin's patents, which were obtained by him while he was employed at Thomas-Detroit and Chalmers-Detroit. A final settlement, in Hudson's favor, came in 1911.



1909 Hudson Model 20

In 1910 Hudson purchased land at Jefferson and Conners Avenues in Detroit. A new 223,000 square foot plant was begun on the property, and 4556 cars were produced by Hudson that year, which placed the firm 17th in registrations.

From the very beginning, Hudson adopted a policy of concentrating on as many new features as possible instead of a vast number of new models, and Hudson's engineers responded with several interesting firsts. In 1910 the company introduced the first die-cast bearings and the first fluid clutch used by the industry. Also in 1910, Coffin began plans for a new car to be released for the 1911 model year, designated Model 33.

The Model 33 was unveiled in 1911 with four cylinders cast en bloc. It introduced the "unit power plant" idea, which combined the engine, clutch, and transmission into one compact, rigid unit. The chassis was simplified and an improved multiple-disk clutch with cork inserts was installed. Prices ranged from \$1000 for a roadster to \$1450 for a torpedo. The firm sold 6486 cars in 1911, and demand was so great that

construction was begun on another 128,000 square foot building.

The Model 33 was continued for 1912, but prices were increased considerably. The big excitement for 1912 was the "mile-a-minute roadster." This car was the standard roadster with certain body parts omitted and with smaller wheels. It came with a guarantee that the car would do 60 miles per hour and the price tag remained the same as for the standard roadster. But sales slipped to 5708 cars in 1912.

Six-cylinder cars were growing in popularity by 1912, but six-cylinder cars at that time were all in the \$3000 bracket. Long impressed by the popularity and smoothness of the six-cylinder design, Chapin, Coffin, and Jackson decided they would cut the cost of these engines. Although no one knew if such an engine could be built in quantity or if there was even a market for a cheap six, these three men started out in 1912 to develop a Hudson Six.

A team of 48 engineers were put to work on the project, and by July 1912 they had a prototype on the test block. J. L. Hudson, who had financed the Hudson

Motor Car Company in the beginning, passed away during the same month. The six-cylinder Hudson Model 54 was announced soon afterward for the 1911 model year. A four-cylinder Model 37 was also announced. The Model 54 gave the customer a choice of six body styles priced from \$2350 for a roadster to \$3750 for a 7-passenger limousine. The Model 33 prices started at \$1875.

Performance of the Hudson Model 54 was right up there with the big ones, and Hudson quickly became the leading manufacturer of six-cylinder cars. A top speed of 65 miles per hour and a pick-up speed of 50 miles per hour in 30 seconds from a dead standstill were claimed for the car. Hudsons had the best weight distribution, which was to their advantage, and they could out-perform larger displacement cars and equip Pierce-Arrow's Model 66, which was over twice the price of a Hudson 54. Hudson also introduced the first production fully enclosed sedan and cabriolet-type bodies in 1913. Sales climbed back up to 6401 cars for that year.

By 1914 the overall weight of the cars was beginning to climb and Hudson engineers turned their attention to that problem. Their answer to it was the Model 6-40, which they displayed at the New York Automobile Show in 1914 on a set of scales to prove the claim. The 6-40 was actually 2772 pounds lighter than the Model 54 and was the first six-cylinder automobile of moderate weight to be built in the United States. The same models were continued for 1915, but the engineering department was working diligently on another history-maker. This was the Hudson Super Six, which became very popular and was to continue practically unchanged for many years.

The new Super Six Hudson made its debut at the Sixteenth New York Automobile Show in January 1916. Although Hudson's engineers had experimented with V-8s and V-12s, they had decided to remain with sixes for their new car. They retained the same displacement as the previous sixes, but emphasis was placed on performance and efficiency. Studies were made to reduce engine friction for increased performance, enlarging gasoline passages and valves and perfecting



cam designs and carburetion to improve breathing. The crankshaft was especially designed with four bearings and featured a special counterbalancing method using eight counterweights of a unique design. This new crankshaft weighed 16 $\frac{1}{2}$  pounds compared to 120 $\frac{1}{2}$  pounds for the old crankshaft with a flywheel. An improved cylinder head permitted a 5 to 1 compression ratio while still using regular fuel. The horsepower rating increased from the 48 horsepower of the earlier sixes to 76 horsepower. At 27 bhp per cubic inch the new Super Six was well above the industry average. The new engine design also resulted in greatly increased running economy and much longer engine life.

The chassis of the car was also all new. Both riding comfort and appearance were improved by the use of Hotchkiss drive and long semi-elliptic springs.

The debut of the Hudson Super Six in January 1916 attracted the attention of one noted race driver of the period, Ralph Mulford. Mulford was quick to realize the potential that the first fully balanced crankshaft and nondetonating, high-compression cylinder head with 5 to 1 compression ratio would have on the racing circuits.

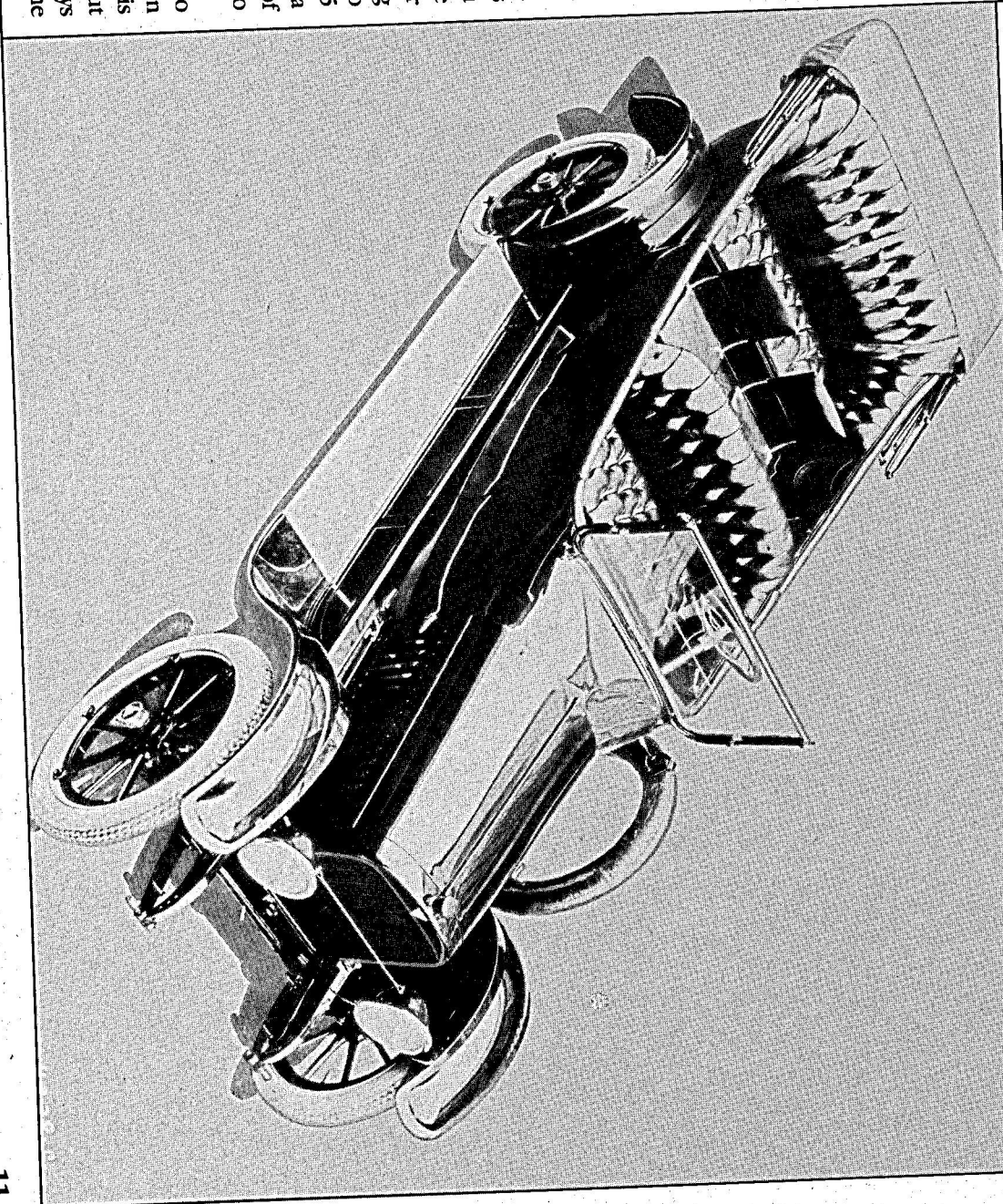
Ralph Mulford had gained fame as the star of the famous Lozier Racing Team. In April 1916 he took a Super Six to Daytona and was clocked at 102.5 miles per hour over the measured mile. Then, less than a month later at Sheepshead Bay, New York, he broke the 24-hour record set by S. F. Edge in a Napier (65.9 mph) by averaging 75.8 mph. After having covered 1500 miles he raised the fastest lap record to 89.4 mph. This record remained unbroken for 15 years. With his otherwise stock Super Six fitted with a racing-type body Mulford then climbed to the top of Pikes Peak in 18 minutes 25 seconds. It took 6 years to beat that record.

A month later, Mulford and Hudson were ready to take on the transcontinental record held by a Marmion Speedster. A 7-passenger Super Six was chosen for this endeavor, and with a two-man crew Mulford set out from San Francisco and arrived in New York City 5 days and 3 odd hours later. Mulford had shattered the

Marmion record by 15 hours. When they arrived in New York the Hudson Super Six was still in such superb condition that the three men took off again to return to San Francisco. Although slowed by heavy rains in the Sierra Nevada Mountains, they again broke the Marmion record and in the process established the first two-way-across-America record in history.

Ira Vail and A. H. Patterson were also very successful on the race tracks behind the wheel of Hudson Super Sixes. As a result the Hudson factory chose them, as well as Mulford, to compete in the various speedway races for Hudson during 1917. Unable to finance a \$571,000 advertising campaign in 1916 through the company's hand-to-mouth profit

1916 Hudson Super Six 7-passenger phaeton



# Hudson Motor Cars

margin and also because he was dissatisfied with the price and quality of parts supplied by Metal Products Company, Chapin decided to produce his own parts at the Hudson plant. Lack of experience and coordination hindered the company at first but these problems were soon ironed out.

Up to this time Hudson had boasted about the benefits received from drawing on the experienced engineering brains of the outside organization. Now they were faced with the task of convincing the public of just the opposite. The firm, however, mastered the situation well.

Although the Hudson Super Six was very successful, the profit margin remained dangerously low. Chapin and Coffin had, at one time, considered recapitalizing by offering shares on the stock exchange. After some consideration they decided against it and instead took the initiative in the closed car field and averted the crisis. Hudson then went ahead and sold more closed cars that year than either Ford or Chevrolet.

Hudson engineers were pioneers and builders of low-priced closed cars. One type, the two-door sedan, was called a "coach" by the Hudson Company.

At the Seventeenth Annual New York Automobile Show, Hudsons were displayed in an array of bright colors, which caused much favorable comment. World War I was rapidly drawing closer and business was doing very well. When war was declared on April 6, 1917 there were 4½ million cars registered in the United States and 25 thousand trucks—not nearly enough to go around. The tremendous demand for automobiles was perhaps the biggest reason why the war had no immediate effect on automobile production—37,000 Super Sixes were produced in 1917.

Vall, Patterson, and Mulford were faring very well on the nation's race tracks in 1917 until the Omaha race. At that race some one accused the race judges of being pro-Hudson. Hudson officials were shocked and they withdrew their sponsorship, turned the cars over to the drivers, and awarded them some \$60,000 accrued prize money. But Hudson cars continued to be campaigned very successfully for many years, although not by the factory.

Hudson paid its few director-share holders a \$3.00 dividend in 1915, but this dropped to \$2.60 in 1917 and \$2.40 in 1918. Earnings dropped to \$1.2 million compared to \$1.5 million in 1917, but Chapin still refused to become involved in large bank loans. The company, instead, plunged into postwar readjustment with greater vigor.

In 1918 over 50,000 units were manufactured and the body range was broadened to ten styles.

By the spring of 1918 a new F-head engine, which Hudson had been developing, with overhead intake valves and side exhaust valves was well enough advanced to warrant its use in a new car. This new car, called the Essex, would be built by Hudson but separately financed. It was felt, however, that the proposed \$1595 price tag was too high and that public reception would be cool so it was kept under wraps. Hudson had planned to keep the price at around \$1000 but rising material and labor costs prevented this. Then, too, automobile factories were finding it increasingly difficult to get steel allotments and many of them were converting to war production. In the meantime, Hudson had climbed into the \$2000 bracket and was considered a quality car.

The new, light, four-cylinder car, called "Essex", finally appeared on January 16, 1919 at the Nineteenth Automobile Show in New York City. The name "Essex" was picked from a map of England, the idea being to pick a snobbish sounding name. "Kent" had been considered but "Essex" won out because it was felt that it implied that the car had a six-cylinder engine—which it did not at the time.

Chapin gambled that a car-hungry public would now respond to the new car. He contracted for a million dollars worth of machinery and equipment to produce the Hudson and Essex cars and added 75,000 square feet of space to his plant. Whether it would make or break the company depended on the sale of at least 40,000 Hudson and Essex cars in 1919. This was a 70%

increase over 1918 production. The gamble paid off, however, and 41,566 Hudson cars passed through their dealers into the hands of anxious customers. The Essex was also a success and on December 6, 1919 the 20,000 car rolled off the Essex assembly line. Like the Super Six the Essex was tested in competition—but by the individual dealerships—and were very successful. It had even carried the mail across the United States. Hudson had weathered the storm and dividends climbed back up to \$2.60 and earnings totaled \$2,287,104.

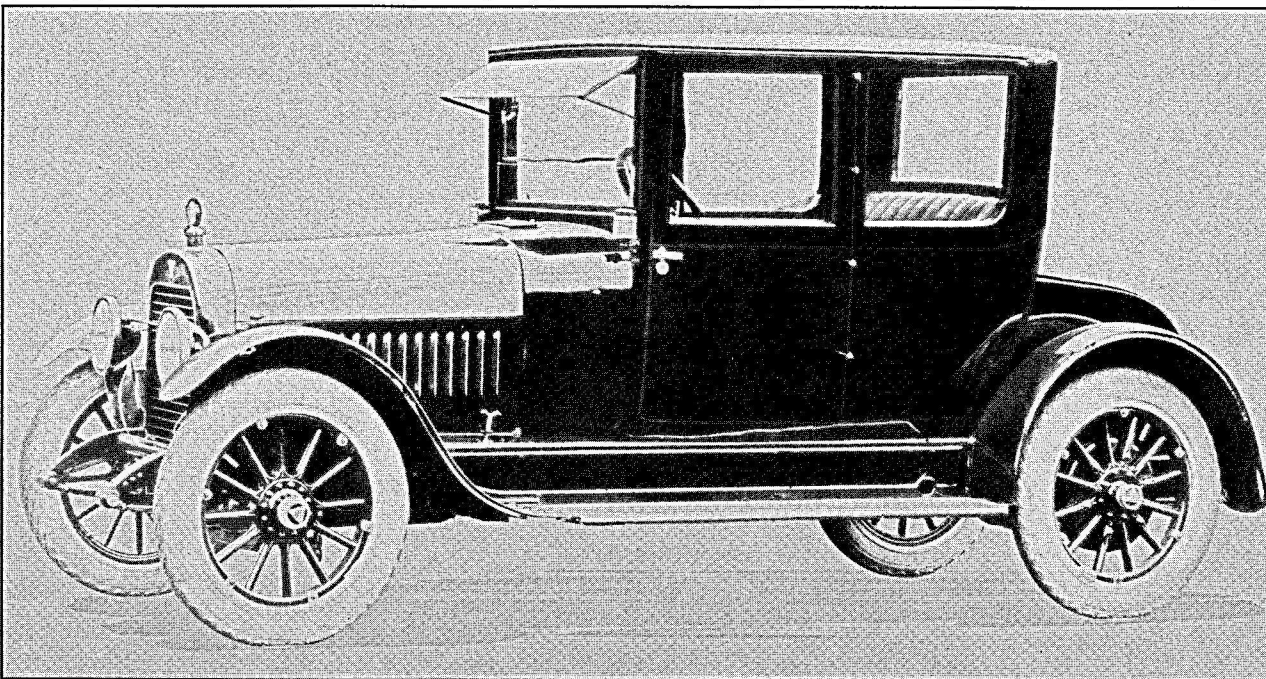
## The Roaring '20s

Hudson's Super Six line for 1920 included a 5-passenger touring car, a 7-passenger touring car, a 3-passenger cabriolet, a 4-passenger coupe, and a 5-passenger sedan. Also available was a deluxe, 7-passenger, fully enclosed suburban limousine with a luggage rack on top, a three-piece ventilating windshield, and old-style parking lamps shaped like tiny square lanterns mounted on the cowl near the windshield corners.

From the time the Hudson Super Six was introduced in 1916 it enjoyed a growing reputation for power and durability. One advertisement in 1921 made the following claim, "The Hudson car wears so slowly and compensating adjustments are so easily made that nothing short of gross neglect will diminish its smoothness or capacity for many years. Mileage (traveled) means almost nothing to a Super Six because instead of declining with increasing rapidity year by year, the Hudson is easily restored to its original newness in performance and resistance to wear. It is so built that inexpensive adjustments keep it in prime condition over long periods of service. That is why you see Hudsons three, four and five years old (many now beyond their 100,000th mile) that are giving services not appreciably less smooth and able than when they were new."

By mid-1921, the postwar boom collapsed. Even the Ford empire nearly succumbed. Hudson-Essex production was less than two-thirds that of 1920, and





*1921 Hudson Super Six 4-passenger coupe*

Chapin and his partners decided to forego the annual dividend for the first time in a decade in spite of the fact that their personal incomes were derived from it. This move kept the two companies fairly healthy even though prices were declining sharply.

Essex produced America's first fully enclosed, low-priced production car and soon the race was on to emulate the mass production success of the Model T Ford. But the difference in prices between the touring models and the closed sedans (which could vary from \$200 to \$1000) hindered the sale of the closed cars. Large stamping presses for steel body panels were still unavailable in 1922, and it was necessary to employ costly cabinet work to shape attractive curves on wooden framed bodies. Chapin reasoned that a serviceable closed car, regardless of how rudimentary in appearance, if priced low enough, might open up a new market.

Two-door coach bodies were offered in both the Hudson and Essex lines for only \$100 more than the

open touring cars. The Essex was offered for \$1195 and the Hudson for \$1695. These prices were actually far below cost. Customer response was so great that Hudson's closed car sales rocketed to 55% of the total in the first 3 months of 1922. By summer, Hudson-Essex cars were being marketed in 50 foreign countries.

The term "speedster" usually referred to a low-slung roadster with a boattail rear deck, and such a model was offered by Essex in the late '20s. However, Hudson applied the term to a 4-passenger touring car in 1922.

Hudson-Essex had become so successful that the Wall Street brokers approached Chapin to get him to sell-out the company and place the company shares on the New York Stock Exchange. Chapin, Coffin, and Bezner finally agreed but under Chapin's terms. Chapin secured for him and his stockholders \$7 million in cash and \$16 million in stock, which retained a two-thirds control for them. The brokers agreed.

The Hudson Super Six continued to be unsurpassed through the 1920s as a comfortable, durable, and powerful medium-priced car. It offered most of the virtues of much higher priced cars and built up an astonishing record for itself.

The same men who started the Hudson Motor Car Company directed the firm into the 1920s but with some changes. In 1923 Chapin became chairman of the board of directors and Jackson moved up to become president. William J. McAneeny became vice-president, but he was devoting more and more of his time to aviation.

Much of Hudson's 1923 promotions were focused on the big four-door sedan. It featured a custom-styled body by Biddle and Smart of Amesbury, Massachusetts. By 1923, the Biddle and Smart factories were devoting their entire plant exclusively to building bodies for Hudson.

In 1924 the introduction of a six-cylinder engine in the Essex was the most notable mechanical change of the mid-twenties. This engine was destined to be produced for 24 years and would become the basis for several Hudson models. The Essex Six, however, did have its faults. It lacked the toughness of its four-cylinder predecessor and had inferior displacement, power output, and performance. Bearing problems were the result of a combination of poor quality motor oils then available and high rpm, which would beat regular grade oils into a kerosene froth. The so-called "Sloppy Six" sold on the merit of the Hudson name and its own reputation for easy starting in all weather; quiet, smooth motor operation at moderate speeds; outstanding ride for the price; and a closed body.

When Chapin embarked on his closed-car folly, continuous strip metal was unheard of, but by using straight-line designs he was able to cut costs drastically. He gambled that the public would accept such an austere design and they did. Actually this type of design was considered quite distinctive in Great Britain where it was called "Razor Edge."

At the beginning of 1925 Chapin reduced the price of the Essex coach to \$895. This was \$5 lower than the open touring car. By the end of 1925 this vogue had

made great inroads throughout the industry, and the sedan replaced the touring car as the standard automobile.

The Technical Research Division at Hudson had been working on a six-cylinder F-head engine of only 175 cubic inches in 1925. It produced 125 horsepower at 5000 rpm and had engine mounts identical to those of the L-head unit used in the Essex. It could have easily been dropped into the Essex chassis had it been produced. The spark plug was located over the exhaust valve instead of the intake—an efficiency feature that was pioneered by Hudson in the four-cylinder F-head engine introduced in the Essex in 1919. But the engine was not produced until 3 years later, and then it was in a larger displacement.

In the late teens most of the Hudson bodies were produced by Briggs and Fisher, but some Budd all-steel bodies were used in 1925. In mid-1926 Hudson began to build their own closed bodies. At first only coach bodies were built, but later in the year, Essex announced an all-steel four-door sedan and Hudson completed a new plant to build 1500 Essex steel bodies a day.

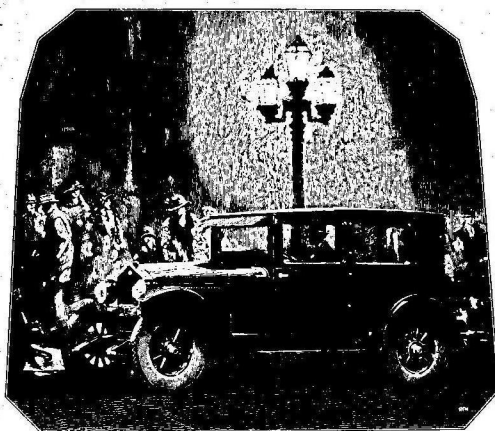
Hudson introduced an elegant brougham model in 1925 with blinds, leather-covered rear quarter sections, and the distinction of being the lowest car on the market—only 62 inches high.

Hudson introduced several innovations in 1928. The boattail speedster on the Essex chassis was not only very handsome but very light as well. It was so light, in fact, that the transmission dusters were switched around to give a shifting sequence from low directly into high gear. Second gear was replaced with an overdrive gear. The first hard-top bodies were introduced by Hudson in 1928. In this style body the windows wound down inside the body and cast aluminum pillars were so located that the distance between them was narrower than the interpupillary range of vision, which resulted in a greatly improved panoramic view.

A new F-head Special Six was unveiled in January 1928. This engine combined the best features of the previous Hudson and Essex engines. It had the deep

## This ESSEX Six \$945 Freight and Tax Extra

With Vibrationless Motor, Long Life and Balloon Tires



### Why Hudson and Essex Outsell All Rivals

#### Still Another Reason *From The Wall Street Journal*

Hudson Motor Car Co.'s recent statement that its sales of cars during the first seven and one-half months of 1924 were in excess of total business during the whole of 1923 calls attention to the exceptional position of this company, both as manufacturer and merchandiser. In view of the conditions which have beset nearly every producer during the past four months, this record of 95,000 cars in seven and one-half months this year against 88,000 cars in all of 1923 is entitled to more than ordinary notice.

Continuing personnel is another important factor in Hudson's remarkable showing. The same officials who "put Hudson over" when it was a small affair are still at the helm. There is a wealth of talent within the Hudson organization of which the public hears but little, which seems content to saw woody ears in and year out, and to successfully evade the spotlight of personal publicity.

It is not merely because the Coach exclusively gives "Closed Car Comforts at Open Car Cost."

It is because both Hudson and Essex offer the most astounding value in genuine car PERFORMANCE and RELIABILITY.

It is because they have vibrationless motors—exclusive to them because they are built on the Super-Six principle.

More than 250,000 owners know their enduring value.

That is why they outsell all rivals—and why the Coach is the largest selling 6-cylinder closed car in the world.

An examination will convince you of quality not obtainable elsewhere within hundreds of dollars of these prices.

In Quality Hudson and Essex Are Alike

HUDSON Super-Six COACH \$1395  
*Freight and Tax Extra*

#### 1924 advertisement for Essex Six

breathing efficiency of the Essex Four, the refinement of the Essex Six, and the beefy torque curve, durability, and effortless high-speed cruising of the Hudson Super Six. The 289 cubic inch engine developed 92 bhp, it was tough and quiet and was capable of doing "70 miles per hour all day," with a top speed of 80 plus. It had acceleration to match. It also had better gas mileage than previous engines. The Special Six also came with hydraulic double-acting shock absorbers on all four corners, brakes equal to the car's speed, remarkable ease of steering and control, safety glass

windshield, adjustable rear seats, and a gauge on the dashboard that let you know how much gas and oil were left. This latter innovation was picked up by Rolls-Royce.

One of the automotive hits of 1929 was created by Hudson engineers. They had developed a method of putting clutch plate corks in hot oil to pre-swell them. They were then ground smooth so they could do their job. The oil acted as a cushion and absorbed more heat, making them smoother and more durable. This clutch could withstand the most brutal tests that the engineers could devise. One such test consisted of placing the car's bumper against a wall and revving the engine up to maximum rpm, then engaging the clutch. The Hudson oil-cushioned clutch could survive an average of twice as many times as the conventional dry-plate clutch.

Hudson had just completed 4 years during which the firm had been the largest money maker of any car manufacturer in relation to the number of cars produced, and business was excellent up until 1929. Hudson had sold more sixes than any other manufacturer in the world. Essex ranked third in national sales. But the Wall Street Crash that year hit the industry hard, and Hudson suddenly found themselves with no money to develop new ideas. There was no money available to develop a more economically sound engine than the big F-head Six so Hudson engineers took the Essex engine, added two more cylinders and a few more bearings, and made a straight eight out of it. The "Great Eight" was completed and ready for the unveiling in the 1930 model year.

### The 1930s

Hudson began to feel the impact of the Depression over the next 2 years and sales took a nose-dive, first to 100,000 units then to 70,209. This happened in spite of the introduction of the "Great Eight" and improvements to the Essex challenger and despite the fact that Hudson did everything possible to initiate and pioneer worthwhile improvements.

With a bore and stroke of 2¾ by 4½ inches, the Great Eight displaced 214 cubic inches. The block and



crankcase were cast integrally. Although the 80 bhp at 3600 rpm was less than the big Six, the wheelbase was 3½ inches shorter and it weighed 585 pounds less so the power-to-weight ratio remained at 4 pounds per horsepower. The Eight, however, lacked the torque of the big Six.

Hudson and Essex cars were not only the most completely equipped cars of the day, but they were equipped with such features as hydraulic shock absorbers, which could be controlled for comfort from the dashboard; adjustable front and rear seats that could also be adjusted for height; and a novel three-way no-draft ventilation system. The little vent windows could be opened, closed, or lowered completely out of sight.

Le Baron created a custom club sedan for the

Hudson Great Eight in 1930. It was equipped with wire wheels, side mounts, covered trunk, sloping windshield, and enclosed rear quarters done in contrasting light colors. Murphy of Pasadena had created the custom bodies for Hudson up until this time.

A model created by Hudson for 1930 was the "Sun sedan." This was a two-door convertible sedan with folding front seats. It was available on both the Great Eight and the Essex chassis. It did not sell well, however, and Hudson's closed models remained the best sellers.

The so-called "idiot lights," which are so popular with the manufacturers today, were pioneered by Hudson in the early '30s. These are the lights that replaced many of the gauges in Hudson cars.

Although wood wheels were standard in both 1930

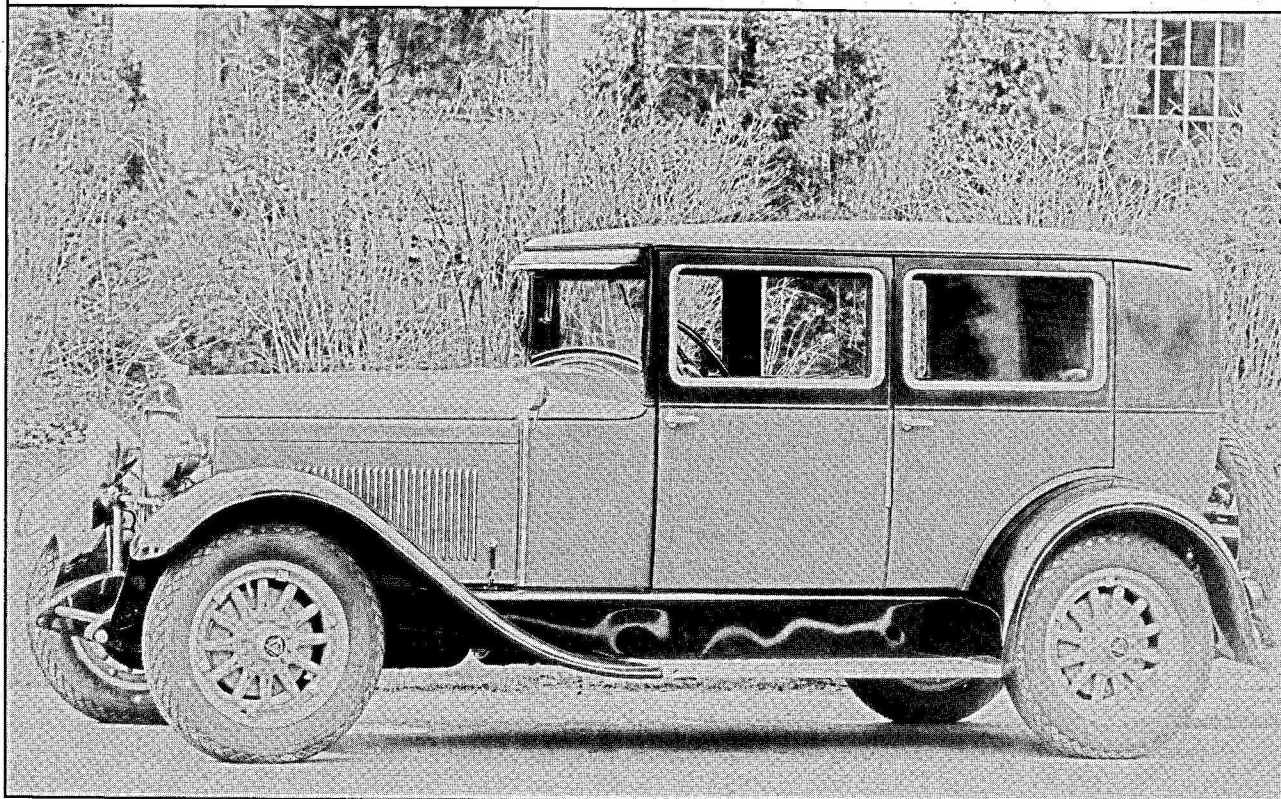
and 1931, most of Hudson's advertisements in 1930 showed cars with wire wheels. In 1931, however, most were shown with wood spokes.

The Essex Six, which developed 28 bhp from 130 cubic inches when it was introduced in 1924, had been enlarged, by 1931, to 175 cubic inches and developed 60 horsepower. Sales were falling off drastically, though, and Hudson management decided it was time to take drastic action. This action was to follow Ford's lead and offer high-priced performance in a \$500 vehicle.

Hudson styling for 1932 was created by Frank Spring, the former chief designer for the Walter M. Murphy Company. Styling was completely new and featured a V-type radiator grille with new one-piece bumpers. Engines developed 101 horsepower and were capable of 85-90 miles per hour speeds and could cruise at 55 miles per hour in silent high gear. The engine came equipped with an intake silencer and filter; new baffles in the oil pan that gave a longer, cooler path for circulating oil; "Startix" automatic starter; and anti-stall. The new car also had free-wheeling and syncromesh transmission, diagonal truss frame with splayed rear springs, twin "neutrator" mufflers, "Ride-Control" adjustable shock absorbers, lateral spring seat cushions, adjustable front and rear seats, and fully operating windshield with two-finger control. Fourteen new models were offered with an attractive choice of three upholstery colors—brown, green or blue—to match the available body colors. Another first for Hudson was the use of metallic paints, which contained powdered aluminum and which later became very popular throughout the industry. Unlike most cars, which had the free-wheeling control on the dashboard, Hudson placed the actuating control in the center of the gearshift knob.

The instrument panel had only two large dials set in a walnut-finished dashboard. Red warning lights let the driver know when the oil pressure was low or the generator was not generating. There were three lines of eight-cylinder cars for 1932—the "Standard," the "Sterling," and the big 132-inch wheelbase "Major," which offered a beautiful "Pacemaker Brougham"

1928 Hudson Model "S" 4-door sedan



sedan.

With no finances to develop a new eight-cylinder engine, Hudson took the Essex six-cylinder engine and increased the bore and stroke to 2 15/16 by 4 3/4 inches. This gave a displacement of 193 cubic inches and developed 70 horsepower at 3200 rpm. After several months of testing in the field and with a new Carter down-draft carburetor, the engine was fitted into a new 106-inch wheelbase chassis with a semi-unitized all-steel body and announced in July 1932 as the Essex Terraplane Six. Amelia Earhart, the famous aviatrix, christened the new line and then Orville Wright took delivery of the first Terraplane on July 21, 1932. The Terraplane name was coined to describe a new motoring experience—land flying. Only the Ford V-8 could match its performance and speed for the price. The Terraplane weighed only 2200 pounds, and the small sedan could amble along at 80 mph all day and get 20-25 miles per gallon of gasoline in the process.

Hudson built and sold six unusual specially built cars with eight wheels, very similar to the Reeves Octoauto, in 1932. They were built for shipment to Japan, where they were to be used over the particularly rough terrain encountered in the Manchurian campaign. Two of these wheels were suspended just behind the front wheels solely for use on rough terrain.

In response to letters and conversations with Hudson owners who expressed a desire for a new Super Six, Hudson again offered a six-cylinder engine in the Hudson in 1932. This now gave customers a choice of either a six-cylinder or an eight-cylinder Hudson car. The new Six had the same engine and wheelbase as the Essex Terraplane, making it nothing more than a badge-engineered Essex Terraplane. The new Hudson Six, however, sported a modified grille, vertical hood louvres, front doors that were hinged at the rear, and semi-skirted fenders.

Roy D. Chapin, Sr., returned from government service in 1933 to try to revive the ailing company he helped to create in 1909. He raised \$6 million in loans in 18 months and invested it in a new car derived from the Essex but now called the Terraplane. The Essex

part of the name was dropped in 1933. The new car's prices began at \$425 and brought new life to the company.

Encouraged by the sizzling performance of the Terraplane Six and the great reception it received from the motoring public, Hudson unveiled a Terraplane Eight in 1933. The Terraplane Eight captured every A.A.A. hill climb record for stock cars. It also set 12 new Class C records at Daytona. Terraplane was a favorite getaway car for gangsters and bootleggers, who valued its speed and performance. John Dillinger would drive nothing else, if given a choice, and whenever a Super Six or a Terraplane was stolen in the Southwest, an alarm went out to the surrounding area to be on the alert for a bank robbery.

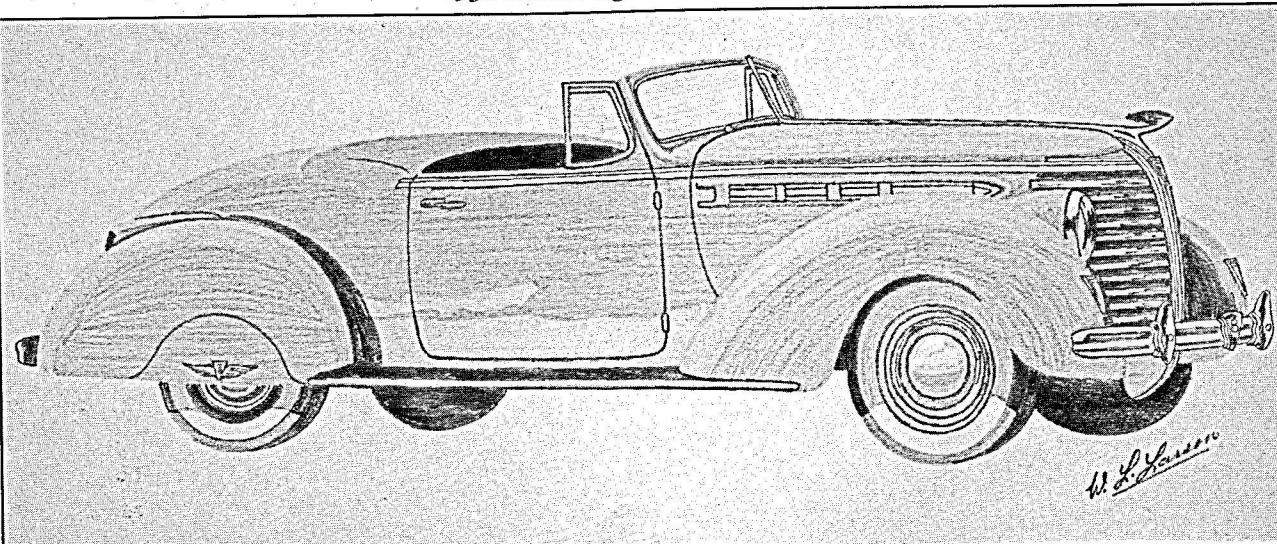
A slogan coined in the mid-thirties went: *"In the air it's aeroplaning, on the water it's hydroplaning, on the ground, hot diggity dog, that's terraplaning!"*

The popularity of low-cost "land flying" soon reached all the way to Europe—especially in Great Britain. Press releases were so enthusiastic there and Terraplanes exported to England were so well received that the Hudson people decided to market a British version under the name Railton.

Hudson paid considerable attention to braking and road holding in their cars. The splayed rear springs were flattened to reduce undesirable effects and were mounted outside the frame to reduce roll when cornering. Telescopic direct-acting Delco shock absorbers were angle mounted, front and rear. The Hudson rotary brake equalizer was an attempt to build inherent brake equalizing into a cable system and thus to compete with hydraulics while retaining "the safety of steel from pedal to wheel." It also provided safety in that the failure of one wheel had no effect on the brakes at the other wheels. 1933 models also had a vacuum reservoir for added safety.

Hudsons were completely new for 1934 and "Axle Flex" semi-independent front suspension appeared. This was a cross between true independent front suspension and a beam axle. Deluxe models were equipped with a radio as standard equipment and the sedans had a built-in trunk. All Hudsons had butterfly ventilating wings in the front door windows and a hill-holding device was optional. An automatic choke was also provided. All Hudson models were straight-eights again and all Terraplanes were sixes, which again raised a howl of protest from admirers of the Super Six.

1938 Hudson Eight convertible coupe





The 1935 Hudsons continued with the same general body styles as in 1934. The big news was the introduction of Bendix "Electric Hand" shifting mechanism. The "Electric Hand" replaced the shifting lever with a small fingertip selector switch on the steering column. A small lever could be moved through a normal shifting pattern, which in turn activated vacuum solenoids on the transmission to select the proper gears. The transmission proper remained basically unchanged. Engine-wise, Hudson remained faithful to their "duo-flow" splash lubrication and again the Carter carburetor was equipped with an automatic choke.

In 1935, 101,080 Hudson automobiles were sold, which left the company with a \$584,749 profit. The Hudson Eight established 35 A.A.A. records at the Muroc Dry Lake and business continued to improve.

Sales for 1936 went up 25% over 1935. This was at a time when independents were failing at such an alarming rate that even the giants of the industry were worried. Roy Chapin, by now the only one left from the original team that founded the Hudson Motor Car Company, worked diligently to save his company. The worry, strain, and overwork affected his health and he contracted pneumonia. On February 16, 1936 at the age of 56 he succumbed to his illness.

Chapin was succeeded to the presidency by A. E. Barit, who started with the firm as a stenographer in the purchasing department and showed great aptitude for finance and management. As a result he was promoted to more responsible positions. As general manager, he worked closely with Chapin.

Hudson was completely restyled for 1936 and "Duo automatic" brakes were unveiled. These brakes consisted of Bendix duo servo brakes with mechanical linkage to both the foot pedal and hand brakes that took over in case the hydraulics failed.

The Terraplane name, which replaced the Essex in the early thirties on inexpensive Hudsons, failed to excite the motoring public and was dropped in 1937. The cars were practically the same as the Hudson cars but were powered by a six-cylinder engine and a three-speed transmission.

## Hudson Motor Cars

Hudson's production peaked at 123,266 units in 1936, but they dropped to eighth place in sales. Their sales were cut in half during the 1938 recession and the firm began to lose money.

### The 1940s

The Hudson line of cars for 1940 was completely restyled. The new design was named "symphonic styling" by the Hudson people. The engine was now putting out 128 horsepower at 4200 rpm. Front suspension was fully independent, with wishbones, coil springs and telescopic shock absorbers located inside the coil springs. Less than 80,000 new Hudsons were registered in 1940 and the firm lost \$1.5 million.

Hudson Eights were again out conquering A.A.A. records in 1940. The record for endurance was set when a Hudson Eight traveled 20,000 miles at an average of 70.5 mph. In August 1939 John Cobb drove a completely stock sedan to an A.A.A. Class C record of 93.9 miles per hour for the measured mile at the Bonneville Salt Flats. At the same time the Hudson Eight took virtually every Class C closed-car record for the standing mile up to 3000 kilometers and from 1 hour to 12 hours. Its average speed for the 12-hour record was 91.29 miles per hour. Hudson now held 121 A.A.A. records.

Another facelift was performed on the cars for 1941, and a new model series, the Commodore, made its debut. Less than 80,000 cars were produced again for 1941, but the company did earn a profit of almost \$8 million, mainly because of defense contracts. By now they were switching over to building anti-aircraft machine guns and aircraft subassemblies in a U.S. Navy ordnance plant near Detroit. Only 5396 cars were produced by the time the assembly lines were shut down on February 5, 1942 to concentrate solely on war production. Actually the 1942 line of cars was the 1940 styles with new grilles and more side trim. From

February 1942 until the end of World War II Hudson built Hell-diver airplanes, Hudson invader engines for landing craft, sections for B29 bombers, Aerocobras, and a variety of naval munitions.

After the end of the war the Hudson Motor Car Company jumped back into the automobile manufacturing business in August 1945 and 5005 units were produced. The 1946 Hudsons were available with a choice of three optional transmissions: overdrive at \$101, Drive-Master at \$112, or Vacuumatic Drive at \$47. Vacuumatic Drive engaged and disengaged the clutch automatically but left the shifting up to the driver. Drive-Master was fully automatic. Postwar production was plagued with material restrictions, steel shortages, and supplier strikes, yet 93,870 units were delivered in 1946.

Hudsons changed very slightly for 1947, when the three millionth Hudson was produced. A total of 95,000 cars rolled off the assembly line that year and profits zoomed to \$5,763,000. Production dropped to 13th place, however, and it was becoming obvious that other manufacturers were growing faster than Hudson.

Hudsons for 1948 were completely new. Hudson had been interested in all-steel bodies and unit construction as early as the 1920s, and this new design was actually created before World War II shut down the assembly lines. Frank Spring had designed and built a prototype step-down semi-unit construction car in 1941, the same year that Nash had unveiled their unitized "600." He showed it to A. E. Barit who rejected it because it was too low. So the car was banished to the roof of the Hudson plant, where it sat rusting away all during the war years.

After the war Spring brought his creation down from the roof and cleaned it up. Then he re-presented it to Barit, who was still not impressed. However, Barit drove it home from work one evening, still complaining that it was too low. But after discovering what an excellent road machine it was, he ordered it into production for 1948. It is reputed that tooling costs reached \$18 million.

The new "step-down" design produced a car that was low and sleek, and, thanks to its low center of

gravity, the car hugged the road and handled very well. Its unit body construction produced a car that was extremely strong and rattle-free. It was probably the safest automotive package ever produced. The floor was dropped between the side members until it was the lowest part of the car structure. The box section longirons were placed outside the rear wheels to allow for roomier footwells and adequate head room. The drive-line was lowered by using a hypoid rear axle and a two-piece drive shaft to minimize the floor hump.

Being a mere 60 inches high and 75 inches wide, the new Hudson's center of gravity was the lowest in the industry in the United States. The new car possessed exceptionally good styling and good aerodynamic form, and dealers cheered its debut. It was just what the doctor ordered for that period of car-hungry customers. Under its sleek aerodynamic hood and behind its wide, low grille could be found the same tried and true straight-eight engine that had powered Hudson cars faithfully for so many years. The engine was smooth and quiet and put out as much honest horsepower as some engines with 70 cubic inches more displacement.

A new engine was also unveiled along with the new "step-down" design. It was a 262 cubic inch Super Six engine, which developed 121 horsepower at 4000 rpm, just 7 horsepower less than the eight-cylinder engine. It was smooth running and durable, and acceleration times of 10-40 miles per hour in 19 seconds, 10-60 miles per hour in 29 seconds, and 0-40 miles per hour in 12 seconds were typical.

In creating the "step-down" design, however, Hudson had committed itself to a design that was difficult to change. Unit bodies are notoriously difficult to rework, and Hudson did not have the financial base to create new models.

Hudson cars for 1949 remained identical to the 1948 models.

### The 1950s

New for 1950 was the "Pacemaker," with a destroked version of the Super Six engine. This 232

cubic inch, 112 horsepower engine performed as well as the top-of-the-line Nash Ambassador and placed the Pacemaker ahead of other cars in the under \$2000 price range.

The 1950 line of Hudson cars also included the Super Six, Super Eight, Commodore Six, and Commodore Eight. Overdrive, Drive-Master, and Supermatic Drive were available for all cars. With "Drive-Master" the driver merely placed the shift lever in "high" and accelerated. When the shift to high was desired the driver merely eased up on the accelerator. With "Supermatic," a high cruising gear was added. The shift to high gear occurred automatically at 22 miles per hour when the Supermatic dashboard button was engaged.

The powerful Hudson Hornet, with its 308 cubic inch six made its debut in 1951 and was priced the same as the Commodore Eight. The engine in this new model developed 145 horsepower at 3800 rpm in stock form, but in the hands of precision tuners such as Marshall Teague, it could develop much more. Teague could get 112 miles per hour from a Hornet certified as stock by the A.A.A. and NASCAR. He was aided in his

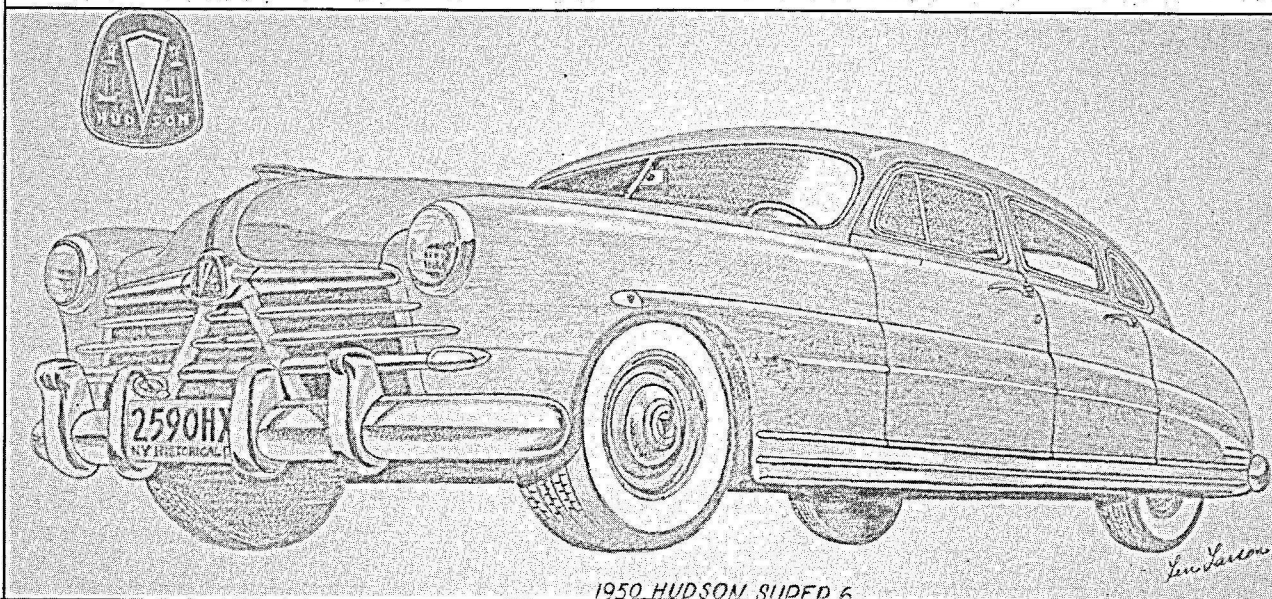
quest by Hudson engineers, who introduced "severe usage" options, which were really disguised racing modifications. The engines were both statically balanced and dynamically balanced electronically, but still there were complaints that this engine was neither as quiet nor as smooth running as the old eight.

Also new for 1951 was the Hollywood hard-top, and the Pacemaker and Super Eight models were dropped.

Hudson decided to go racing in 1951 and Hudson engineer Tom Rhoades got the job of overseeing the operation. Although there were six other makes with more powerful engines than Hudson, at the end of the NASCAR racing season Hudson was in third place in standings behind Oldsmobile and Plymouth. In 1952, however, Hudsons won 27 of 34 NASCAR Grand Nationals, placing them in first place in standings. Oldsmobile and Plymouth had to share second place.

The Wasp replaced the Super Six in 1952. Approximately 76,000 cars left the factory but the "step-down" was badly in need of restyling. \$12-million had been invested in creating the 105 inch wheelbase Jet for 1953. The Jet was powered by a 104-horsepower engine and with "Twin H-Power" and high-

1950 Hudson Super Six owned by Rod Hudson



1950 HUDSON SUPER 6



compression head it was a very fast little car. It was a well-built, "roadable" car, but it was a rather ugly machine and attracted few buyers to Hudson dealerships.

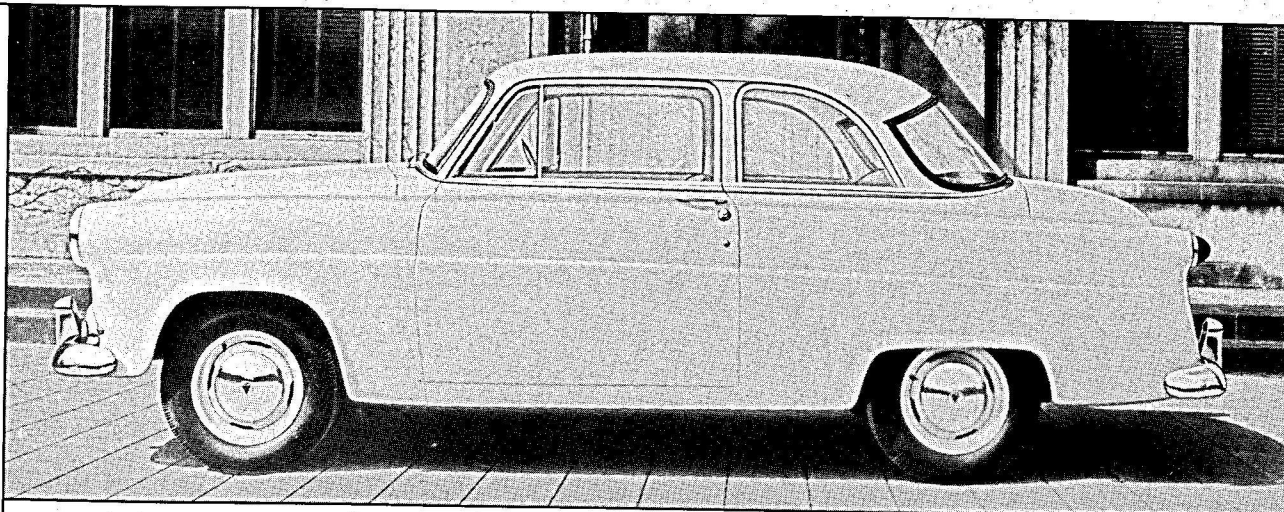
"Twin H-Power" was announced for Hornets and Wasps in June 1952. The dual carburetor manifold was Hudson's answer to the 4-barrel V-8s. Although optional at extra cost, "Twin H-Power" soon appeared on more than 50% of the Hornets produced. When installed in the standard car sold to the public it would give up to 170 horsepower at 4000 rpm, a top speed of over 100 miles per hour, and 0-60 miles per hour in 14 seconds.

The Commodores were discontinued in 1953; the line of big cars was out and 76,000 cars were produced. The Hornet's peak year was 1953. It continued as champion in 1953 and 1954, but each year saw fewer wins than the year before. These losses were noted by the press, who headed their stories: "Is Hudson Slipping?" and "Has the Hornet Lost It's Sting?"

### The Merger

Rumors began to circulate in 1953 of a merger between Hudson and Nash. Hudson sales were down and the books were filled with red ink. Hudson lost \$6 million between January 1, 1954 and April. Outmoded styling, the Jet, a weak dealership network, and insufficient capital for expansion were responsible.

George Mason of Nash-Kelvinator and Barit of Hudson worked out a merger plan during lunch on June 16, 1953. This agreement, as it developed, sounded death knell for Hudson. Negotiations with Packard and Studebaker continued during the winter of 1953-1954 as possible third members of the merger. Under a tentative agreement the company was to become known as American Motors. Nash and Studebaker would build small cars to compete against Ford, Chevrolet, and Plymouth; Hudson cars would compete with Oldsmobile, Buick, Pontiac, Mercury, De Soto, etc.; and Packard would compete with Cadillac, Lincoln, and Imperial. Hudson's and Packard's top management agreed to retire and let Mason



*The 104 HP Hudson Jet was a forerunner of the compact car. (Courtesy of the AACA Library)*

run the corporation along with top aids from Studebaker.

On January 14, 1954 Hudson and Nash directors agreed on a merger in which Hudson was absorbed by Nash-Kelvinator and became known as American Motors Corporation. Studebaker and Packard, however, had a change of heart and felt that because they had the V-8 engines, which is what Nash and Hudson needed, that they should control the corporation and did not join the merger. Nash-Kelvinator stockholders held their shares at par value, while Hudson stockholders had to accept two shares for three. The last "step-down" Hudson rolled off the line at Jefferson Avenue on October 31, 1954.

The Jet did spark a project that could very well have become the long awaited new Hudson had it been handled a little differently. This was the "Italia" designed in the Hudson studios by Frank Spring but built by Carozzeria Touring of Milan, Italy. The Italias had wrap around windshields, doors that curved into the roof for easy entry, fender scoops to duct cooling air to the brakes, flow through ventilation, and form-fitting leather seats. They were 10 inches lower than the production 1954 Hudson Hornet. Twenty-five Italias were built plus a four-door derivative called the X-161. All were sold for \$4800 each. Although the

name suggested Italian styling, it was hardly that. Italias were rather ugly, awkward, bulky looking, and rather overly ornamented, with several chrome exhaust-like extensions protruding from the rear fenders, but they did have some interesting innovations. If the Italia had been designed by one of the Italian carozzeria it is very possible that the Italia may have sparked a revival for Hudson.

The Hudson name continued until June 25, 1957, but these were badge-engineered Nashes built at Kenosha, Wisconsin. The Hudson triangle also appeared on some Rambler models. Nash also became unprofitable after the merger, and it too vanished from the scene in 1958, leaving only the Rambler as a marque in its own right.

### References

Cars of the Early Twenties by Tad Burness; Cars of the Early Thirties by Tad Burness; Cars of the '40s by the Editors of Consumer's Guide; Cars of the '50s by the Editors of Consumer's Guide; Those Wonderful Old Automobiles by Floyd Clymer; Collector's History of the Automobile by Peter Roberts and edited by Horace J. Elias; The Old Car Book by John Bentley; The Old Time Automobile by John Bentley; Antique Automobiles by John Bentley; Automobile Quarterly, article by Maurice D. Hendry.